Arizona Mathematics Standard Performance Level Descriptors Grade 4

<u>Exceeds the Standard</u> – Students who score in this level illustrate a superior academic performance as evidenced by achievement that is substantially beyond the goal for all students. Students who perform at this level demonstrate a wealth of knowledge, skills, and abilities in fulfillment of the math standard. They can order multi-digit whole numbers, multiply whole numbers, and interpret data displays to solve word problems.

<u>Meets the Standard</u> – Students who score in this level demonstrate a solid academic performance on subject matter as reflected by the math standard. Students who perform at this level are able to subtract whole numbers, solve addition or subtraction equations with a variable, and determine the equivalency among fractions, decimals, and percents. They can find the perimeter of polygons, evaluate expressions with one algebraic variable, and utilize rules for creating patterns and functions.

Approaches the Standard – Students who score in this level show partial understanding of the knowledge and application of the skills that are fundamental for proficient work. Students who perform at this level show some understanding of the math standard's concepts and procedures by adding whole numbers, dividing whole numbers using single-digit divisors, solving one-step word problems, and identifying lines of symmetry, translations of shapes, and problem-solving procedures. Some gaps in knowledge and skills are evident and may require additional instruction and remediation in order to achieve a satisfactory level of understanding.

<u>Falls Far Below the Standard</u> – Students who score in this level may have significant gaps and limited knowledge and skills that are necessary to satisfactorily meet the state's math standard. Students will usually require a considerable amount of additional instruction and remediation in order to achieve a satisfactory level of understanding.

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Students at the "Exceeds the Standard" level generally	Students at the "Meets the Standard" level generally	Students at the "Approaches the Standard" level
know the skills required at the "Meets" and	know the skills required at the "Approaches" level and	generally know and are able to:
"Approaches" levels and are able to:	are able to:	
 Multiply whole numbers. Make reasonable estimates for complex computations. Order multi-digit whole numbers. Analyze data from probability experiments to predict the likelihood of events. Find all possible combinations of sets of items. Interpret data displays to solve word problems. 	 Determine equivalency among fractions, decimals, and percents. Subtract whole numbers. Solve addition or subtraction equations with a variable. Make reasonable estimates for computations. Identify and apply rules for creating patterns and functions. Evaluate expressions with one algebraic variable. Compare weights using U.S customary or metric units. Find the perimeter of polygons. Predict outcomes of probability experiments and compare the predictions to actual outcomes. 	 Read, write, identify, and represent whole numbers using models and symbols. Add whole numbers. Divide whole numbers using single-digit divisors. Select operations to complete number sentences. Solve one-step word problems. Identify multiples of single-digit numbers. Estimate distance on maps. Identify graphs that display specific organized data. Read data displays. Identify appropriate tools for making specific measurements. Read thermometers. Identify lines of symmetry. Identify 3-dimensional shapes and 2-dimensional views of 3-dimensional shapes. Identify similar shapes. Identify translations of shapes. Interpret simple Venn diagrams. Identify simple problem-solving procedures.

These descriptors do not include all the skills and knowledge as contained in the Math Standard.